

METHOD OF DESIGNING A HEAT SEAL WIDTH
BACKGROUND OF THE INVENTION

ABSTRACT

This invention provides a method of designing a suitable heat seal width which is more resistant to unseal more unsealing than conventional heat-sealing, which ~~comprises~~ involves the steps of;

- (1) heat-sealing a test piece of a sheet to be heat-sealed at a temperature lower than the fusion temperature of a heat seal portion of the sheet,
- (2) heat-sealing another test piece of the sheet at a temperature at or higher than the fusion temperature,
- (3) pulling to peel a heat-sealed portion of each test piece, and measuring the pull strength variation with peel length,
- (4) calculating the peel energy in various peel length as of the test piece heat-sealed at a temperature lower than the fusion temperature of the heat seal portion of the sheet by integrating the pull strength variation,
- (5) calculating also the peel energy of the test piece heat-sealed at the temperature of at or higher than the fusion temperature by integrating the pull strength variation up to rupture at a heat-sealed portion, and
- (6) setting the heat seal width at a peel length having a peel energy higher than the peel energy of the test piece heat-sealed at the temperature of at or higher than the fusion temperature.